

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/541,750A  
Source: IFWP  
Date Processed by STIC: 06/22/2006

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IFWP

## RAW SEQUENCE LISTING

DATE: 06/22/2006

PATENT APPLICATION: US/10/541,750A

TIME: 12:55:13

Input Set : E:\Substitute sequence list-13311-00009-US.txt

Output Set: N:\CRF4\06222006\J541750A.raw

3 <110> APPLICANT: Matuschek, Markus  
 4 Klein, Daniela  
 5 Heinekamp, Thorsten  
 6 Schmidt, Andre  
 7 Brakhage, Axel  
 8 Achatz, Brigitte

10 <120> TITLE OF INVENTION: Method for producing carotenoids or their precursors using  
 11 genetically modified organisms of the Blakeslea genus,  
 12 carotenoids or their precursors produced by said method and use  
 13 thereof

15 <130> FILE REFERENCE: 13311-00009-US  
 17 <140> CURRENT APPLICATION NUMBER: US/10/541,750A  
 18 <141> CURRENT FILING DATE: 2005-07-08  
 20 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/000099  
 21 <151> PRIOR FILING DATE: 2004-01-09  
 23 <150> PRIOR APPLICATION NUMBER: DE 103 00 649.4  
 24 <151> PRIOR FILING DATE: 2003-01-09  
 26 <150> PRIOR APPLICATION NUMBER: DE 103 41 271.9  
 27 <151> PRIOR FILING DATE: 2003-09-08  
 29 <160> NUMBER OF SEQ ID NOS: 80  
 32 <170> SOFTWARE: PatentIn version 3.2  
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 35 <211> LENGTH: 2160  
 36 <212> TYPE: DNA  
 37 <213> ORGANISM: Artificial Sequence  
 39 <220> FEATURE:  
 40 <223> OTHER INFORMATION: Promoter  
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63	ttggaatgaa catgaatctg aggactgcaa tcgccatgag gttttcgaaa tacatccgga	660
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67	gatagctctg caaaggcgct tgcacaatgc aagtcaaacg ttgctagcag ttccaggtgg	780
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Cpg-6)

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79 tacagaataa gataggtgga gagcttatac cgagctccca aatctgtcca gatcatgggt      1140
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145 ttcatattgtc caagcagcaa agagtgcctt ctagtgattt aatagctcca tgtcaacaag      180
147 aataaaaacgc gttttcgggt ttacctcttc cagatacagc tcactctgcaa tgcattaatg      240
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151 agctattttc attttcggga gacgagatca agcagatcaa cggtcgtcaa gagacctacg      360
153 agactgagga atccgctctt ggtccacgc gactatatat ttgtctctaa ttgtactttg      420
155 acatgctcct cttctttact ctgatagctt gactatgaaa attccgtcac cagcncctgg      480
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163 ctcttatgag tcgtttaccc agaatgcaca ggtacacttg ttttagaggta atccttcttt      720
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197 cagttcatgg gcgttggcat gatggccgtc atgcatctgt acttcaagta caccaacgct      180
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235 aaatgtgacg aactcgtgag ctctgtacag tgaccgggtga ctctttcttg catgcgagga      1320
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241 aaaggctggg gtgcccctcg ttgaccaaga atctattgca tcatcgagga atatggagct      1500
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PATENT APPLICATION: US/10/541,750A

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/541,750A

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Output Set: N:\CRF4\06222006\J541750A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 267,475,566  
Seq#:3; N Pos. 3471,3679,3770  
Seq#:4; N Pos. 227,318,526,8946,10028  
Seq#:36; N Pos. 10264,10472,10563  
Seq#:37; N Pos. 10264,10472,10563  
Seq#:38; N Pos. 10264,10472,10563  
Seq#:39; N Pos. 10264,10472,10563  
Seq#:40; N Pos. 3471,3679,3770  
Seq#:41; N Pos. 3471,3679,3770  
Seq#:42; N Pos. 10264,10472,10563  
Seq#:43; N Pos. 10264,10472,10563  
Seq#:44; N Pos. 10264,10472,10563  
Seq#:45; N Pos. 18970,19178,19269  
Seq#:46; N Pos. 3471,3679,3770  
Seq#:47; N Pos. 10264,10472,10563  
Seq#:48; N Pos. 10264,10472,10563  
Seq#:49; N Pos. 3471,3679,3770  
Seq#:50; N Pos. 10264,10472,10563  
Seq#:51; N Pos. 10264,10472,10563  
Seq#:52; N Pos. 3,9  
Seq#:53; N Pos. 3,6  
Seq#:62; N Pos. 3471,3679,3770  
Seq#:75; N Pos. 2694,4263

## VERIFICATION SUMMARY

DATE: 06/22/2006

PATENT APPLICATION: US/10/541,750A

TIME: 12:55:14

Input Set : E:\Substitute sequence list-13311-00009-US.txt

Output Set: N:\CRF4\06222006\J541750A.raw

L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:240  
M:341 Repeated in SeqNo=2  
L:307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:3420  
M:341 Repeated in SeqNo=3  
L:761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:180  
M:341 Repeated in SeqNo=4  
L:3771 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:10260  
M:341 Repeated in SeqNo=36  
L:4342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:10260  
M:341 Repeated in SeqNo=37  
L:4968 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:10260  
M:341 Repeated in SeqNo=38  
L:5570 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:10260  
M:341 Repeated in SeqNo=39  
L:5944 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:3420  
M:341 Repeated in SeqNo=40  
L:6586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:3420  
M:341 Repeated in SeqNo=41  
L:7456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:10260  
M:341 Repeated in SeqNo=42  
L:8070 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:10260  
M:341 Repeated in SeqNo=43  
L:8662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:10260  
M:341 Repeated in SeqNo=44  
L:9544 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:18960  
M:341 Repeated in SeqNo=45  
L:9702 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:3420  
M:341 Repeated in SeqNo=46  
L:10666 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:10260  
M:341 Repeated in SeqNo=47  
L:11284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:10260  
M:341 Repeated in SeqNo=48  
L:11654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:3420  
M:341 Repeated in SeqNo=49  
L:12524 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:10260  
M:341 Repeated in SeqNo=50  
L:13172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:10260  
M:341 Repeated in SeqNo=51  
L:13463 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0  
L:13486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0  
L:13724 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:3420  
M:341 Repeated in SeqNo=62  
L:14610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:2640  
M:341 Repeated in SeqNo=75